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THEDWASTRE RURAL DISTRICT COUNCIL.

WEST SUFFOLK.

R E P O R T

of the

MEDICAL OFFICER OF HEALTH

for the Year

1947.

ROBERT H. CLAYTON, M.B., B.S., B.Hy., D.P.H.



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ANNUAL REPORT

of the

Medical Officer of Health for the Rural District
of Thedwastre in the County of West Suffolk for the year
ending 31st December, 1947.

Public Health Offices,
8, Whiting Street,
Bury St. Edmunds.

July 1948.

To:-

The Chairman and Members of the
Rural District Council of Thedwastre.

Mr. Chairman, Ladies and Gentlemen,

Herewith I beg to submit for your favourable
consideration my Annual Report as Medical Officer of Health,
being that for the year ended 31st December, 1947.

I wish to acknowledge with sincere thanks the help
and consideration given to me by my colleagues and all
members of the Council.

I am, Mr. Chairman, Ladies and Gentlemen,

Your obedient servant,

ROBERT H. CLAYTON.

M.B., B.S., B.Hy., D.P.H.

Public Health Officers of the Authority.

(a) Medical - One part-time Medical Officer of Health

Robert H. Clayton, M.B., B.S., B.Hy.,
D.P.H. (Durham), Cert. Mental Deficiency
and Allied Subjects (London), appointed
1st July, 1938.

This Officer does not engage in private practice but
holds in addition the following appointments:-

Medical Officer of Health, Newmarket U.D.C.	}	Appointed 1st July, 1936.
Mildenhall R.D.C.		
Thingoe R.D.C.		
Cosford.		Appointed February 1937.

(b) Others - One Sanitary Inspector,

Oswald J. Wyatt, M.S.I.A., A.R.San.I.,
Meat Cert.R.S.I., appointed June 2nd, 1930,
also Building Surveyor and Housing Manager.

SECTION A.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

1. GENERAL STATISTICS. Area 34,126 acres.

Registrar General's estimate of the resident population 1947. 8,199 (1946.) (8,180)

Number of inhabited houses at end of year according to Rate Book 2,608 (2,552)

Rateable Value £27,416 (£27,066)

Sum represented by a Penny Rate £114 (£112)

2. EXTRACTS FROM VITAL STATISTICS FOR THE YEAR.

<u>Live Births.</u>	<u>Total.</u>		<u>Male.</u>		<u>Female.</u>	
	1947.	(1946)	1947.	(1946)	1947.	(1946)
Legitimate	131	(125)	66	(53)	65	(72)
ILlegitimate	19	(23)	11	(14)	8	(9)

<u>Stillbirths.</u>	<u>Thedwastre.</u>		<u>England & Wales.</u>	
	1947.	(1946)	1947.	(1946)
Legitimate	4	(5)	3	(1)
Illegitimate	Nil	(1)	Nil	(Nil)
<u>Deaths.</u>	125	(97)	65	(45)

	<u>Thedwastre.</u>			<u>England & Wales.</u>	
	1936 to 1945 Decade Average.	1947.	(1946)	1947.	(1946)
<u>Birth Rate.</u> (Live births per 1000 civilian population)	15.6	18.3	(18.1)	20.5	(19.1)
<u>Rate of Illegitimate births per 1000 legitimate births.</u>	76	145	(184)	-	(-)
<u>Stillbirth Rate per 1000 total (live & stillbirths).</u>	36.2	26.0	(39.0)	-	(-)
<u>Death Rate per 1000 resident population.</u>	13.2	15.2	(11.9)	12.0	(11.5)
<u>Death Rate of Infants under 1 year.</u>					
All infants per 1000 live births.	43.7	73.3	(20.3)	41	(43)
Legitimate Infants per 1000 legitimate births.	41.2	61.1	(16.0)	-	(-)
Illegitimate Infants per 1000 illegitimate births.	76.1	157.9	(43.5)	-	(-)

The total number of Live Births to Thedwastre Residents during 1947 was 150 of which 89 were born in Thedwastre and 61 elsewhere.

The number of Stillbirths in 1947 was 4 and in 1946 the corresponding figure was 6.

Illegitimate Births declined from 26 in 1945, to 23 in 1946 and to 19 in 1947.

125 deaths (97 in 1946) occurred during 1947 including no death from Maternal Causes (Headings 29 & 30), 13 deaths from Cancer, no deaths from Measles, Whooping Cough or Diarrhoea (under 2 years).

Deaths of Infants under one year of age during 1947 were eleven - (3 male legitimate, 5 female legitimate and 3 male illegitimate) - the corresponding figure in 1946 was 3. The eleven infants died one on the first day, three others in the first week, five others in the first month, one in the second month and one in the fifth month. All these eleven deaths were related to Congenital Malformation, birth injury, infantile disease, Premature Birth or Pneumonia.

Only one other child of pre-school age died - a girl 3 years old from digestive disease.

No deaths of school children occurred, neither was there any further deaths in the nonage.

Only six further deaths took place before age 45 years, of which four were due to Tuberculosis, one to Typhoid and one from urinary infection.

The age and sex distribution of deaths is indicated in the table below.

						<u>Male.</u>		<u>Female.</u>		<u>Total of Male & Female.</u>		<u>Male & Female % of Total.</u>			
						1947.	1946.	1947.	1946.	1947.	1946.	1947.	1946.		
Under 1 year						6	(1)	5	(2)	11	(3)	9%	(3%)		
1 year & 5 years						1	(1)	1	(2)	1	(2)	1%	(2%)		
5 years						1	(1)	1	(1)	1	(1)	1%	(1%)		
15 "						1	(1)	1	(1)	1	(1)	1%	(1%)		
25 "						4	(2)	1	(2)	5	(4)	4%	(4%)		
45 "						11	(7)	12	(4)	23	(11)	18%	(11%)		
65 & over.	65	"	"	"	70	9	(4)	3	(7)	12	(11)	10%	(12%)	67% in 1947.	
	70	"	"	"	75	11	(7)	9	(6)	20	(13)	16%	(14%)		
	75	"	"	"	80	10	(10)	14	(11)	24	(21)	19%	(22%)		
	80	"	"	"	85	8	(11)	8	(10)	16	(21)	13%	(22%)		
83 in 1947.	85	"	"	"	90	4	(2)	3	(6)	7	(8)	5%	(8%)	80% in 1946.	
	90	"	"	"	95	1	(1)	1	(2)	2	(2)	2%	(2%)		
	95	"	"	"	100	1	(1)	1	(1)	1	(1)	1%	(1%)		
(76 in 1946)	100	"	"	"	105	1	(1)	1	(1)	1	(1)	1%	(1%)		
	Σ						64	(34)	60	(42)	124	(96)	100%	(100%)	

Σ One male Road Traffic Death not recorded locally.

Comment was made in my Annual Report for 1946 of the increase in Cerebral Haemorrhage deaths - a similar table is given below, for the five Districts for which I am Medical Officer of Health, to illustrate this trend.

	1936.	1937.	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.	1947.
Newmarket U.D.C.	11	4	11	7	10	16	17	8	18	14	16	13
Cosford R.D.C.	8	10	5	4	14	16	16	16	14	9	25	14
Mildenhall R.D.C.	10	6	6	11	18	15	17	14	15	16	20	12
Thedwastre R.D.C.	NR	NR	3	7	22	15	12	19	12	11	9	12
Thingoe R.D.C.	9	16	9	11	25	19	24	14	14	22	23	36
TOTAL:			34	40	89	81	86	71	73	72	93	87

N.R. The figures for these years were not recorded locally.

On page 5 is a table giving statistics for 1947 and for the previous year, 1946, as also for the decade from 1936 to 1945. From this table have been prepared the decade figures which allow comparison with this period and the year 1947.

Below is a table giving the causes and number of deaths in 1947 occurring at the various age groups. The totals correspond with the Registrar-General's figures, but one fewer male Road Traffic Accident death was recorded locally.

The deaths are classified under the headings given in the New Abridged List of Causes, as used in England & Wales & Northern Ireland, as set out on Page XXXIX of the Manual of the International List of Causes of Deaths - 1938.

CAUSES OF DEATHS.		Deaths at the sub-joined ages of "RESIDENTS" whether occurring in or beyond the District.									
Sl. No.	M = Male. F = Female.	Under 1 year.	1 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	TOTAL Registrar-General's figures.		
		M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.		
1.	Typhoid & Paratyphoid Fevers.	- -	- -	- -	- -	1 -	- -	- -	1 -		
6.	Tuberculosis of Respiratory system.	- -	- -	- -	- 1	2 -	1 -	- -	3 1		
7.	Other forms of Tuberculosis.	- -	- -	- -	- -	- 1	- -	- -	- 1		
3.	Cancer of buccal cavity & oesophagus(M)uterus(F).	- -	- -	- -	- -	- -	1 -	- -	1 -		
4.	Cancer of stomach and duodenum.	- -	- -	- -	- -	- -	- -	2 1	2 1		
5.	Cancer of Breast.	- -	- -	- -	- -	- -	- 3	- -	- 3		
6.	Cancer of all other sites.	- -	- -	- -	- -	- -	2 2	2 -	4 2		
8.	Intra-cranial vascular lesions.	- -	- -	- -	- -	- -	- 2	2 8	2 10		
9.	Heart Disease.	- -	- -	- -	- -	- -	5 3	21 21	26 24		
0.	Other Diseases of circulatory system.	- -	- -	- -	- -	- -	- -	1 1	1 1		
1.	Bronchitis.	- -	- -	- -	- -	- -	- 1	2 1	2 2		
2.	Pneumonia.	1 4	- -	- -	- -	- -	- 1	- 1	1 6		
7.	Other digestive diseases.	- -	- 1	- -	- -	- -	- -	4 1	4 2		
8.	Nephritis.	- -	- -	- -	- -	- -	- -	2 1	2 1		
1.	Premature Birth.	- 1	- -	- -	- -	- -	- -	- -	- 1		
2.	Congenital malformations, birth injury, infantile disease.	5 -	- -	- -	- -	- -	- -	- -	5 -		
3.	Suicide.	- -	- -	- -	- -	- -	1 -	- 1	1 1		
4.	Road Traffic Accidents.	- -	- -	- -	- -	- -	1 -	- -	2 -		
5.	Other violent causes.	- -	- -	- -	- -	- -	- -	1 -	1 -		
6.	All other causes.	- -	- -	- -	- -	1 -	- -	6 4	7 4		
TOTAL: Males.		6 -	- -	- -	- -	4 -	11 -	43 -	65 -		
Females.		- 5	- 1	- -	- 1	- 1	- 12	- 40	- 60		

* One male Road Traffic death not recorded locally.

	Rateable Value.	Penny Rate Product.	No. of inhabited houses.	Registrar-General's Estimate Population.	Total Deaths.	Deaths under one year.		Births.		Stillbirths,	
						Legitimate.	Illegitimate.	Legitimate.	Illegitimate.	Legitimate.	Illegitimate.
1936.	£22,590	£98	2,384	7,714	103	7	Nil	99	5	3	Nil
1937.	£23,296	£98	2,418	8,040	102	2	Nil	100	5	6	Nil
1938.	£23,783	£99	2,447	7,691	79	3	Nil	112	2	6	Nil
1939.	£24,751	£103	2,409	7,724	101	7	Nil	101	6	4	1
1940.	£25,141	£103	2,551	8,851	132	3	Nil	110	4	7	Nil
1941.	£25,019	£105	2,543	9,525	113	8	Nil	125	6	6	Nil
1942.	£25,003	£104	2,544	9,052	119	4	1	146	6	7	Nil
1943.	£26,781	£111	2,539	8,713	130	4	1	133	11	2	Nil
1944.	£26,723	£111	2,545	8,342	105	4	2	155	21	3	Nil
1945.	£26,777	£111	2,548	8,150	125	8	3	132	26	3	1
TOTALS FOR DECADE.	-	-	-	-	1,109	50	7	1,213	92	47	2
ANNUAL AVERAGE DURING DECADE.	£24,986	£104	2,493	8,380	111	5	0.7	121	9	4.7	0.2
1946.	£27,066	£112	2,552	8,180	97	2	1	125	23	5	1
1947.	£27,416	£114	2,608	8,199	125	8	3	131	19	4	Nil

1936
to
1945.

SECTION B.

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

(a) LABORATORY FACILITIES. For some years these facilities have been provided, with complete satisfaction, on payment of a fixed annual sum, by the Emergency Public Health Laboratory Service, use being made of their Laboratory at Cambridge. The Government, however, as part of their nationalisation scheme, decided that these facilities should be provided free as from 31st March, 1947, by the same Service.

1947 furnished, during the Typhoid Outbreak in the parish of Rattlesden, a further example (not that any such was needed) of just how excellent are the facilities offered by the Emergency Public Health Laboratory Service.

Dr. R. M. Fry, the Director of the Laboratory at Cambridge, and Dr. A. M. McFarlan of that Laboratory, (who specialises in epidemiology of infectious disease outbreaks) gave every assistance possible, both at the Laboratory and during field work in Rattlesden. Rattlesden being situated some eight miles to the East, or Ipswich, side of Bury St. Edmunds, and several of the cases being admitted to the Ipswich Isolation Hospital, it was sometimes more convenient to deliver specimens to the Ipswich Laboratory of the Emergency Public Health Laboratory Service. The Director at Ipswich, Dr. P. H. Martin, was equally co-operative and enthusiastic so that this outbreak provided us with an insight into the splendid co-operation and team work which exists between the various laboratories of this Service, the co-ordination at the Central Public Health Laboratory and the value of the Central Enteric Reference Laboratory and Bureau, where Dr. A. Felix specialises in the Typhoid group of diseases.

(b) AMBULANCE FACILITIES. As in previous years General and Maternity cases were transported by the Red Cross Society ambulances and Infectious Disease Cases by the Stowmarket U.D.C. ambulance.

(c) NURSING IN THE HOME. This work was carried on as in previous years by Local Nursing Associations whose nurses reside in the villages of Hindolvestra, Great Ashfield and Woolpit, whilst some parishes on the periphery are served by nurses residing at Stanton and Bradfield St. George.

(d) CLINICS AND TREATMENT CENTRES. These continued as in previous years.

(e) HOSPITALS. The hospitals used by Thedwastre residents are indicated by stating that of the 124 deaths recorded locally 89 took place at the residents' home in Thedwastre, 4 at homes of relatives or friends beyond the District and 31 at hospitals as follows:-

15 West Suffolk	(General)	Hospital,	Bury St. Edmunds.
10 St. Mary's	{ P.A.C. }	"	" " "
4 St. Audry's	{ Mental }	"	Melton.
1 White Lodge	{ E.M.S. }	"	Newmarket.
1 Exning	{ Isolation }	"	"

The Stowmarket Isolation Hospital dealt with our more usual infectious disease cases, but owing to limited facilities and staff it was necessary also to send cases to Ipswich Isolation Hospital and Exning Isolation Hospital, Newmarket.

The 150 births during 1947 took place, as has been stated, 89 in residents' homes in Thedwastre and 61 outside the District. The great majority of these 61 births outside the District occurred either at St. Mary's (P.A.C.) Hospital, Bury St. Edmunds, or at The West Suffolk (General) Hospital, Bury St. Edmunds.

SECTION C.

SANITARY CIRCUMSTANCES OF THE AREA.

1. (i) WATER. Approximately a quarter of a mile of main at Gedding (which pipes water from Captain Walmsley's supply to the council houses there and a few private houses en route, a total of 14 houses), is the only existing public piped water supply in Thedwastre.

The Council have taken steps to remedy this position and are partners with Thingoe in a Comprehensive Scheme to supply both Rural Districts. This Comprehensive Scheme was prepared by Mr. Blizzard, Consultant Engineer of the firm of Messrs. Lemon & Blizzard, and presented to both Authorities in January 1945, when it was unanimously accepted and forwarded to the Minister of Health for his observations. Sanction to proceed with the sinking of three trial bore holes was granted on the 24th April, 1945, and this work was completed in May 1946, when each bore provided a very satisfactory supply. The results of these borings were submitted to the Minister and following a further interview in July 1946 instructions were given to the Council's Engineers to prepare drawings and bills of quantity for submission for the purpose of Local Inquiry.

The Scheme has a capital cost of £642,000 - loan charges and running expenses are calculated at approximately £36,000 per annum. The Thedwastre portion is about one-third of the whole scheme.

A Public Inquiry into this Comprehensive Water Scheme was held on November 19th, 1947, by Colonel G. Ewart Rhodes, M.I.C.E., Barrister-at-Law, at which the Chairman of the Council (Alderman Charles Daking), the Clerk, the Sanitary Inspector and the Medical Officer of Health gave evidence stressing the need for and the desire to introduce such a comprehensive water scheme which would allow the provision of houses with suitable amenities, a safe water supply to the inhabitants, a safer milk supply, an adequate water supply, greater comfort and convenience to the inhabitants, and the relief of insanitary conditions.

Evidence was given that periods of drought, (in which the wells at Drinkstone, Rattlesden, Woolpit, Elmswell and Tostock had dried up) alternated with excessive wet periods (when there was flooding of wells, as for example at Rattlesden, Stowlangtoft and Thurston).

Since 1937 the total number of samples submitted for analysis had been 225, and they had been reported upon as follows:-

<u>No. of samples.</u>	<u>Type of well.</u>	<u>Satisfactory.</u>	<u>Suspicious.</u>	<u>Unsatisfactory.</u>
65	Bores	63 (97%)	1 (1.5%)	1 (1.5%)
160	Surface wells	37 (23%)	13 (8.0%)	110 (69.0%)

The percentage of unsatisfactory samples would have been higher had fewer been taken from Council wells and more from private sources of supply, as the majority of the private source wells are brick lined with open joints, gave evidence of surface pollution, and disclosed the presence of dead rats, frogs, and other creatures. Many are sited in close proximity to stockyards and cesspools.

Such a piped supply would assist in the provision of adequate sewers and drains and obviate the difficulties experienced by the inhabitants in the disposal of pail closet contents.

A survey of the District indicated that only 17% of the houses had the well within the house or the water from the well conducted within the house - a further 54% had the water supply within 200 feet of the house, whilst 29% brought their water from a distance of more than 200 feet.

The position in each parish is indicated by the table on the following page.

<u>Parish.</u>	<u>Total Houses.</u>	<u>Water Supply in house.</u>	<u>Water Supply Within 200 feet.</u>	<u>Water Supply at more than 200 feet.</u>
Hinderclay	61	2	13	46
Wattisfield	120	6	93	21
Rickinghall	85	13	61	11
Walsham-le-Willows	264	42	178	44
Stowlangtoft	49	6	35	8
Langham	38	8	17	13
Badwell Ash	119	9	73	37
Hunston	30	6	21	3
Ashfield	97	16	44	37
Thurston	211	59	141	11
Norton	217	33	132	52
Elmswell	298	77	41	180
Tostock	89	24	54	11
Beyton	109	17	58	34
Drinkstone	130	16	76	38
Woolpit	247	36	154	57
Hessett	98	11	68	19
Gedding	44	18	7	19
Rattlesden	229	38	127	64
Felsham	96	9	35	52
	<u>2,631</u>	<u>446</u> (17%)	<u>1,428</u> (54%)	<u>757</u> (29%)

1947 was similar to many preceding years in that shortage of water was experienced so that during the whole year carriage of water was required at Woolpit and Drinkstone.

26 samples of water were submitted to bacteriological examination, and of these 15 were satisfactory, 2 suspicious and 9 unsatisfactory. Warning notices were issued where required.

(ii) DRAINAGE & SEWERAGE. Drainage and Sewage Schemes to the appropriate villages which have already been surveyed will await the time when the Comprehensive Water Scheme has been installed and when economic tenders can be obtained. In the meantime the Council continue to install pail closets into the new council houses, together with bath and sink water drainage and septic tanks.

2. RIVERS AND STREAMS. A man was employed continuously during the year by the Council cleaning out ditches and streams in the District. No new problems arose in this connection.

3. (i) CLOSET ACCOMMODATION. The working class houses in the District are almost entirely supplied with pail closets.

(ii) PUBLIC CLEANSING. The Council decided to undertake refuse collection and for this purpose ordered a vehicle, but, unfortunately, delivery time was eighteen months. In the meantime, largely because of the great increase in the consumption of canned goods and to remove unsightly accumulations of refuse, the Council employed local contractors who used 4/5 tonnage open lorries to remove refuse quarterly. The extent of this collection during 1947 is indicated by the following table:-

	<u>1st Collection, Sept.</u>			<u>2nd Collection, Decemb.</u>		
	<u>Loads.</u>	<u>Cost.</u>		<u>Loads.</u>	<u>Cost.</u>	
Great Ashfield.	5	£4.	0. 0.	1½	£3.	0. 0
Badwell Ash.	1	4.	0. 0.	2	3.	0. 0
Beyton.	1½	2.	16. 0.	2	2.	16. 0
Drinkstone.	1	4.	0. 0.	2	3.	15. 0
Elmswell.	5	7.	0. 0.	6	8.	0. 0
Gedding & Felsham.	3	6.	0. 0.	4	7.	10. 0
Hessett.	1½	2.	16. 0.	2	2.	16. 0
Hinderclay.	3	4.	0. 0.	3	4.	0. 0
Langham, Stowlangtoft, Hunston.	3	4.	0. 0.	1½	3.	0. 0
Norton.	3	2.	0. 0.	5	7.	10. 0
Rattlesden.	3	6.	0. 0.	3	6.	0. 0
Rickinghall.	3	4.	0. 0.	3	4.	0. 0
Tostock.	1½	2.	16. 0.	2	2.	16. 0
Thurston.	1	4.	0. 0.	4	7.	10. 0
Woolpit.	11	11.	4. 0.	10	12.	19. 0
Walsham-le-Willows.	7	10.	0. 0.	5	12.	0. 0
Wattisfield.	3	4.	0. 0.	3	4.	0. 0
	<u>56½</u>	<u>£82.</u>	<u>12. 0.</u>	<u>59</u>	<u>£94.</u>	<u>12. 0</u>

(iii) SANITARY INSPECTION OF THE AREA. Mr. Wyatt has supplied the following tabular statement:-

	<u>Number of Inspections.</u>					
Dwelling Houses, Routine Inspections	259
Bacon Factory	235
Butchers Premises	67
Food Shops and Bakehouses	71
Factories	27
Shops	47
Cowsheds	79
Dairies	79
Water Samples	26
School Inspections	17
Interviews	6
Complaints	3
Building Surveyor	115
Council Houses	270
Petroleum Act	107
Miscellaneous	96
Tents, vans and sheds	23
Visits, Building Licences	450
						<u>1,977</u>

Classified list of Housing Defects and Nuisances
abated during the year.

New Drains tested and passed	..	..	..	..	..	12
Roofs repaired	..	..	..	..	..	12
Chimneys repaired	..	..	..	..	..	1
Ceilings and walls repaired	..	..	..	..	..	25
Dampness	..	..	..	..	..	15
Windows repaired	..	..	..	..	..	5
Fireplaces repaired	..	..	..	..	..	12
Floors repaired	..	..	..	..	..	5
Closets repaired or renewed	..	..	..	..	..	2
Others	..	..	..	..	..	5
						<u>94</u>

In addition to the above, repairs were carried out to the Council Houses and those requisitioned under the Government Evacuation Scheme.

The number of Preliminary Notices served was 26.

Factory Act, 1937. Inspections for purposes of provisions as to health.

Premises.	Number on Register.	Inspections.	Written Notices.	Occupiers Prosecuted.
(i) Factories in which Sections 1,2,3,4 & 6 are to be enforced by Local Authorities.	37	245	One	Nil
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority.	18	47	Nil	Nil
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises).	Nil	Nil	Nil	Nil
Total:	55	292	One	Nil

* i.e. Electrical Stations (Section 103 (1)), Institutions. (Section 104) and sites of Building Operations and Works of Engineering Construction (Sections 107 and 108).

Particulars.	Number of cases in which defects were found.				No. of cases in which prosecutions were instituted.
	Found.	Remedied.	Referred To H.M. Inspector.	By H.M. Inspector.	
Sanitary Conveniences Unsuitable or Defective.	One	One	Nil	Nil	Nil

(iv) SHOPS AND OFFICES. 47 inspections relating to the provision of the Shops Act, 1934, were made. From these inspections, which pay regard to cleanliness and to the provision of suitable and sufficient heating, ventilation and sanitary accommodation, no action was required in any case.

(v) CAMPING SITES. 1 application for a licence to occupy a site was made and granted in 1947. There are three sites in use in the area, the number of persons concerned being approximately 20. Seven visits were made to these sites from which no action arose.

(vi) SMOKE ABATEMENT. No action necessary.

(vii) SWIMMING BATHS AND POOLS. Nil.

(viii) ERADICATION OF BED BUGS. No houses infected with Bed Bugs were found during 1947.

(ix) RATS AND MICE. The services of the Council's Rat Catcher has been retained. This Officer, under the supervision of the Sanitary Inspector makes a systematic inspection of all premises (excluding farm premises) within the District. It takes approximately ten months to make a complete survey of the area.

Of the 4,000 premises visited, 84 were infested, all of which received treatment. The bodies of 401 rats destroyed were picked up, the estimated kill being 1,200.

4. SCHOOLS. 17 visits were made to schools. At Rattlesden, complaints of smells disclosed the presence of an untrapped yard drain. This, of course, was remedied.

SECTION D.

H O U S I N G.

- | | |
|--|-----|
| 1. (i) (a) Total number of dwellinghouses inspected for housing defects (under the Public Health or Housing Acts.) | 380 |
| (b) Number of inspections made for the purpose. | 720 |
| (ii) (a) Number of dwellinghouses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925. | Nil |
| (b) Number of inspections made for the purpose. | Nil |
| (iii) Number of dwellinghouses found to be in a state so dangerous or injurious to health as to be unfit for human habitation. | Nil |
| (iv) Number of dwellinghouses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation. | 350 |

2. Remedy of Defects during the year without service of formal notices:-

Number of defective dwellinghouses rendered fit in consequence of informal action by the Local Authority or their officers.	350
---	-----

3. Action under Statutory Powers during the year:-

- | | |
|---|-----|
| (a) Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936. | |
| (i) Number of dwellinghouses in respect of which notices were served requiring repairs. | Nil |
| (ii) Number of dwellinghouses which were rendered fit after service of formal notices:- | |
| (a) By Owners | Nil |
| (b) By Local Authority in default of Owners | Nil |

- (b) Proceedings under Public Health Acts.
- (i) Number of dwellinghouses in respect of which notices were served requiring defects to be remedied Nil
- (ii) Number of dwellinghouses in which defects were remedied after service of formal notices
- (a) By Owners Nil
- (b) By Local Authority in default of Owners Nil
- (c) Proceedings under Sections 11 and 13 of the Housing Act, 1936.
- (i) Number of dwellinghouses in respect of which demolition orders were made Nil
- (ii) Number of dwellinghouses demolished in pursuance of Demolition Orders Nil
- (d) Proceedings under Section 12 of the Housing Act, 1936. Nil

4. Housing Act, 1936 - Part IV - Overcrowding.

- (a) (i) Number of dwellings overcrowded at the end of the year 11
- (ii) Number of families dwelling therein 16
- (iii) Number of persons dwelling therein 97
- (b) Number of new cases of overcrowding reported during the year Nil
- (c) (i) Number of cases of overcrowding relieved during the year 6
- (ii) Number of persons concerned in such cases 32
- (d) Particulars of any cases in which dwellinghouses have again become overcrowded after the Local Authority having taken steps for the abatement of overcrowding Nil

As reported in my Annual Report for 1945, the Council completed the "Hobhouse Survey" of the District in 1945.

Post-War Housing Progress is indicated in the following Table:-

	<u>New Houses Provided.</u>			
	<u>Council Houses.</u>	<u>Mutments. Family Units.</u>	<u>Private Houses.</u>	
1946.	18	3	5	
1947.	37	6	16	
Total:	55	9	21	Grand Total 85
In course of erection	43	1	4	
	98	10	25	Grand Total 133

Thus, by the end of 1947 the provision of 85 dwellings in the District was completed and the provision of 133 was far advanced.

The Council owned 390 houses by the end of 1947.

Civil Building Licenses Issued During 1947.

Privately owned working class houses (repairs) (214 cottages)	149
Private Residences	110
Public Houses	9
Farm Houses	50
Farm Buildings	22
Shops	5
Church	5
Workshops	9
New Houses	4
Public Hall	2
Miscellaneous	11
Re-erection of Bungalow	1
Total:	377

The four houses licensed were allocated to a clergyman, plasterer, miller & farmer.

SECTION E.

INSPECTION AND SUPERVISION OF FOOD.

- (a) MILK SUPPLY. The number of Registered Cowkeepers and Retail Purveyors of Milk is 116. 79 visits were paid to Cowsheds and dairies.

Local Authorities' interest and progress in this work is still hindered by the intention to transfer these functions to the Minister of Agriculture and Fisheries.

- (b) MEAT AND OTHER FOODS. The St. Edmundsbury Co-operative Bacon Factory at Elmswell is the only licensed slaughter house regularly in use within the District. During the year 235 visits were made and the 36,233 pigs slaughtered all inspected.

	<u>Number Condemned.</u>	<u>Approximate Weight.</u>
Carcases	87	14,362 lbs.
Heads	1,661	21,593 "
Plucks	967	6,089 "
Intestines	700	-
Kidneys	3,060	765 "
		<u>42,809 "</u>

- (c) ADULTERATION, ETC.

- (d) CHEMICAL & BACTERIOLOGICAL EXAMINATION.

} No change.

- (e) NUTRITION. The anxiety, expressed in my Annual Reports of 1945 and 1946, about the state of nutrition of the less fortunate groups among the community and particularly about old people, attracted the attention of the Ministry of Food with the result that a Nutritional Survey was carried out in January and February 1948 in the villages of Felsham and Drinkstone by Miss Rosamond Harrison, a dietitian, on the staff of Dr. Magnus Pyke, Scientific Adviser, Ministry of Food.

The Report on this Survey states "that the calorific content of the rations to which the old people were entitled as the basis of their diet was 1,870 calories per day and that to this could be added a substantial contribution from such unrationed foods as fish, sausages, rabbits, fruit, green vegetables or meat pies. This list also could be extended to include eggs, home-grown potatoes, bonus issues of sugar for preserving, beer, tinned soups and a miscellaneous collection of items which, though each may be trifling in itself, together make up a not inconsiderable supplement to a normal diet".

The nutritional value of the diets eaten were calculated, by weighing, for each of four persons and found to be for two men 2,433 and 1,811 calories per day and for two women 1,658 and 1,669 calories per day. It was thought that these figures would be sufficient to allow of one of the women doing eight hours work per day in such an occupation as ironing or dishwashing, whilst the second woman had sufficient for eight hours work say sewing or an hour's walk could be undertaken and the remaining seven hours spent at a less active occupation. The nutritional value of the diets eaten by the other persons were calculated by comparing the food eaten with models, e.g. of slices of bread, and the conclusion drawn was "that provided they are sufficiently active physically and mentally to obtain their supplies and prepare and cook them or have assistance in doing so, the diet they actually eat is also in fact adequate".

The conclusions expressed above have not convinced the old people that they are wrong when they think they are going to bed hungry - neither are they convinced by opinions that due to rationing the working classes are fed better than ever before. They still remember that years ago small village shops, which thrived on the purchases of the working classes only, had shelves stocked with an abundance and almost infinite variety of foodstuffs. Such conditions have disappeared along with the 72 hour week, child labour,

and the unlimited, almost non-paid labour in India and China. There is still, as expressed in the 1945 Report, appreciation of the need for rationing and of the Government's efforts; but good as the rationing scheme is and despite the flexibility of the whole distribution system, which certainly allows unlimited food to active persons, with adequate means, living in proximity to restaurants, there is need for further provision for those unable to feed away from home for reasons including rural habitation, inadequate financial resources, old age and infirmity.

(f) SHELL-FISH. }
(g) WATER-CRESS. } No change.

SECTION E.

PREVALENCE OF & CONTROL OVER INFECTIOUS AND OTHER DISEASES.

The following table shows the number of Infectious Diseases among the civilian population during the year. These are the final numbers after corrections subsequently made either by the Notifying Medical Practitioner or by the Medical Superintendent of the Infectious Diseases Hospital. It will be noted that the total number is 113 - the corresponding figure for 1946 was 62. 13 Typhoid, 1 Scarlet Fever, 1 Measles, 2 Infantile Paralysis (one not confirmed) patients were removed to Isolation Hospital.

ALL NOTIFIABLE DISEASES (other than Tuberculosis) DURING 1947.

	Infantile Paralysis.	Scarlet Fever.	Whooping Cough.	Measles.	Typhoid.	Ophthalmia Neonatorum.	Puerperal Pyrexia.	Infective Hepatitis.	Erysipelas.
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.
113 TOTALS.	- 1	2 2	2 4	42 42	8 6	- 1	- 1	- 1	1 -
Age 0 to under 1	- -	- -	1 -	- -	- -	- 1	- -	- -	- -
1 " " 3	- -	- -	- -	1 4	- -	- -	- -	- -	- -
3 " " 5	- -	1 -	- 1	7 7	1 -	- -	- -	- -	- -
5 " " 10	- 1	1 1	1 3	21 20	1 -	- -	- -	- -	- -
10 " " 15	- -	- -	- -	9 7	- 2	- -	- -	- -	- -
15 " " 25	- -	- -	- -	2 1	3 -	- -	- -	- -	- -
25 " " 45	- -	- 1	- -	2 3	2 1	- -	- 1	- 1	- -
45 " " 65	- -	- -	- -	- -	1 2	- -	- -	- -	1 -

138 children (111 age 0-4 years and 27 age 5-14) completed Diphtheria Immunisation during 1947. 165 children previously immunised were given a Secondary or Reinforcing Injection. At the end of the year it was estimated that 51% of the children under 5 years of age and 93% of children between 5 and 15 years had completed the Diphtheria Immunisation Course. The percentage immunised under 5 years of age is better indicated by taking only those children 1 year old and not yet 5 years, as Immunisation is rarely completed before the child reaches 1 year old - the percentage then of age 1 year and under 5 years immunised was 64%.

This figure (64%) approximates more closely to the desire of the Ministry of Health (expressed 23rd July, 1947, Circular 128/47) "that an intensive effort will be made to achieve the immunisation of at least 75% of all infants reaching the age of one year."

TUBERCULOSIS. NEW CASES DURING 1947.

	Respiratory.		Non-Respiratory.			Respiratory.		Non-Respiratory.	
	M.	F.	M.	F.		M.	F.	M.	F.
0-4	-	-	-	-		-	-	-	-
5-14	-	1	-	-		-	-	-	-
15-24	1	1	-	-		-	1	-	-
25-34	1	2	-	-		1	-	-	-
35-44	1	-	1	1		1	-	-	1
45-55	-	-	-	1		-	-	-	-
55-64	1	-	-	-		-	-	-	-
65 & over	-	-	-	-		-	-	-	-
	4	4	1	2		3	1	-	1

27 cases remained on the Tuberculosis Register at the end of the year, Respiratory Male 7, Female 10, and Non-Respiratory Male 6, Female 4.

TYPHOID AT RATTLEDSEN, 1947.

14 cases of Typhoid were notified as having occurred in the 215 house parish of Rattlesden (eight miles South East of Bury St. Edmunds) during 1947 - to these may be added one case which was apparently infected in Rattlesden but developed, and was notified, outside the District.

The following is a summary of the outbreak which affected six households, as indicated in the following table.

CASE	SEX AND AGE	DATE DIAGNOSED OR CONFIRMED	H O U S E						DATE OF ONSET
			No. 1.	No.2.	No. 3.	No.4.	No.5	No. 6.	
No. 1.	M.50.	5th July	Father						28/6/48
" 2.	F.48.	"	Mother						26/6/48
" 3.	M.17.	"	Son						28/6/48
" 4.	M.32.	"		Lodger					30/6/48
" 5.	M. 4.	"		Son					2/7/48
" 6.	F.10.	"			Daughter				25/6/48
" 7.	M.16.	"			Son				26/6/48
" 8.	F.13.	"			Daughter				26/6/48
" 9.	M.23.	"			Son				26/6/48
" 10.	F.30.	8th July		Mother					12/7/48
" 11.	F.46.	15th July			Mother				15/7/48
" 12.	M. 6.	17th July		Son					17/7/48
" 13.	M.38.	"				Husband			11/7/48
" 14.	F.67.	1st August					Lady		?
" 15.	F.22.	18th July						Daughter	2/7/48
OTHER OCCUPANTS									
			-	Father	Father	Wife	Sis- ter	Father	
				Son (2yrs)	Grand- mother			Mother	
								Daughter	
								Son- in-law	
								Grand- daughter. 1 year.	

Thursday, July 3rd. Evening. Agreed on 'phone with Dr. Stevens, general practitioner, that a family (House No.1., see page 23.6" map) of three adults (Cases 1, 2 & 3), with pyrexia of unknown origin of six days' duration, be removed the following morning to Ipswich Isolation Hospital as possible Typhoid cases.

Saturday, July 5th. Dr. Martin of the Emergency Public Health Laboratory, Ipswich, confirmed that these three adults, now in Hospital, were Typhoid cases. They were:-

House No.1.

Father, Male, Age 50. Case 1. Onset 28/6/47.
 Mother, Female, Age 48. Case 2. Onset 26/6/47.
 Son, Male, Age 17. Case 3. Onset 28/6/47.

This information was passed to the County Medical Officer, the Senior Regional Medical Officer, Ministry of Health, Cambridge, to C. F. Daking, Esq., Chairman, Thedwastre Rural District Council, and to medical men practising in the District who were asked to review recent patients for the possibility of a "missed case".

Dr. Stevens had, at his surgery, this morning, seen (from House No.2) a male adult (Case 4) complaining of headache and abdominal discomfort whose landlady, a mother (Case 10) of three boys, this man stated, was similarly affected. A visit disclosed:-

House No.2.

Lodger,	Male,	Age 32 (Case 4).	Onset 30/6/47. A case of Typhoid.
Mother,	Female,	Age 30 (Case 10).	Denied being, and did not appear, ill.
Father.			Appeared Quite Well.
Son,	Male,	Age 6 (Case 13).	Recovering from Measles.
Son,	Male,	Age 4 (Case 5).	In bed as a developing Measles - but was a Typhoid.
			Onset July 2nd.
Son,	Male,	Age 2.	Quite well.

This information was passed to Dr. Stevens who was definite that the 6 year old son had been a straightforward case of Measles (this was subsequently proved correct, as later the boy developed Typhoid) and, therefore, he had believed that the brother, the four year old son, was developing Measles - in view of suggestion that Measles could simulate Typhoid Dr. Stevens, who was reviewing his cases (there were several households in the parish in which were cases of Measles) suggested a visit to House No.3., where he had attended Females 10 years and 13 years and a Male 16 years as Measles. A visit disclosed:-

House No.3.

Grandmother,			Quite Well.
Mother,	Female,	Age 46. (Case 12).	Quite Well.
Father,			Quite Well.
Daughter,	Female,	Age 10. (Case 6)	Onset 25th June. Case of Typhoid.
Son,	Male,	Age 16. (Case 7).	Onset 26th June. Case of Typhoid.
Daughter,	Female,	Age 13. (Case 8).	Onset 26th June. Case of Typhoid.
Son,	Male,	Age 23. (Case 9).	Onset 26th June. Case of Typhoid.

Case No.7. had a profuse, rose pink, macula, abdominal, rash, each spot being much larger than typical "Rose Pink" spots of Typhoid and the spots were so numerous that they did not correspond with text book descriptions of a dozen or two.

Case No.6 had had a similar rash but it was now "iron stain" colour

Cases Nos. 8 and 9 had no rash.

Due to Dr. Stevens' clinical acumen, cases had thus been identified in two more houses on this the first day that Typhoid had been confirmed as having occurred in one of the houses in the village. The information that three houses were infected was passed to the County Medical Officer, the Ministry of Health, Cambridge, the Emergency Public Health Laboratory Staff at Cambridge and Ipswich, to local medical practitioners, to the Chairman of the Council and to the local Councillor, all of whom were promptly notified of all subsequent developments.

Thedwastre, despite the absence of public piped water supplies or public sewers, has in past years been fortunate in that the only previous cases of Typhoid in this century notified or reported were as under:-

PREVIOUS CASES OF TYPHOID IN THEDWASTRE.

Notified
or Onset.

⌘ 22.7.44. T/L. Male 42 years, Rattlesden.
15.6.40. H/B. Male 34 years, Tostock.
19.10.31. E/H. Female 12 years, Elmswell. (Proved negative).
6.3.29. F/R. Male 27 years, Rattlesden.
30.6.10. E/K. Male 29 years, Felsham.
20.8.04. A/K. Male 28 years, Woolpit.

⌘ This man with whom all the present patients denied recent contact and who lives at House "A" was admitted to West Suffolk General Hospital, Bury St. Edmunds, on 26th July, 1944, having been ill since 22nd July, 1944. He was diagnosed Typhoid on a 1/1250H Titre blood result from specimen taken August 2nd, 1944 - urine and faeces specimens taken the same day were negative and not repeated, consequently, no typing was done. This case was notified to the Medical Officer of Health, Bury St. Edmunds, who passed on the information to me when the patient left Hospital. At that time the patient's home, House "A" was within the confines of an aerodrome used by the American Air Force - two sets of armed guards had to be passed to reach it and official passes were required, consequently, visitors to the house were nil - the patient attributed his illness to cleaning a ditch blocked with sewage effluent - further information and investigation was not then possible.

...

MONDAY Investigations as to the cause of infection were commenced and continued throughout the following day (Sunday) and Monday until 3 p.m. on Monday, July 7th, when a conference was held at Rattlesden with Dr. Martin, Dr. Fry and Dr. McFarlane of the Emergency Public Health Laboratory Service, and Mr. Daking, Chairman, Thedwastre Council, to whom were reported details of investigations into the supplies of water, milk, vegetables, watercress, bread, cakes, ice-cream, fish, groceries, corned beef, pressed beef, etc. to households 1, 2 and 3, in which had arisen Cases 1, 2, 3, 4, 5, 6, 7, 8 and 9. The visitors to these households and the places visited by the members of these households had been ascertained to attempt to find a common contact and to notify Medical Officers of Health of the various Districts to which contacts had proceeded. Neither was the vague possibility overlooked that Case 9 might be Typhoid Osteitis rather than Potts' Disease.

The enquiries showed that, in common, the three households had only the same grocer's and butcher's stores.

Mr. Wyatt, Sanitary Inspector, Thedwastre District, in addition to Mr. Casson and Mr. Barker, Sanitary Inspectors of our neighbour, Thingoe R.D.C., had since Saturday been continuing a door to door visit in the village, advising the precaution of boiling water and milk, ascertaining visitors, seeking news of contact with any of the cases and enquiring concerning recent illness in the household in order that I might concurrently visit all such persons, together with all cases previously suspected of being Measles. The school had been visited and absentees and recent illnesses checked.

With the co-operation of Capt. J. P. Mara, (Officer Commanding Rattlesden Satellite Camp) Rattlesden and the area within two-mile radius had been put out of bounds for German Prisoners of War and on Capt. Mara's instructions medical inspection and surveillance of Prisoners of War had been arranged and was maintained.

All information concerning food, drink and visitors was presented and scrutinised and showed that the only articles of common purchase were corned beef and pressed beef.. It was noted that House One were Thursday customers

"	Two	"	Wednesday	"
"	Three	"	Monday	"

In view of these different weekly shopping days and the amount of the turnover, more than one infected tin would have been required (but this would have produced many infected households and Case 2 was emphatic that she had not partaken of these commodities) or an infected person might be present in the stores. The Bacteriologists, therefore, decided to Widal Test all persons employed in the stores - they also assisted by visiting all persons in the village known to be ill and took blood tests where such were considered desirable. The Bacteriologists were especially interested in Case No. 2 (House 1) for this lady is a cripple and had not left her house since a taxi ride to church on Sunday, June 1st. Her sister-in-law, (Mrs. B.) who lives at house "B" was especially noted and questioned to establish a link with the three infected households, but no link with households 2 and 3 was elicited, and, moreover, Mrs. "B" stated that, within recent times, she had not been to visit her relatives at House "1" until after they were ill.

Tuesday, July 8th. The blood tests taken by the Bacteriologists from all persons at the Stores were negative, as were all taken from persons ill - the blood of the landlady at House "2", however, suggested that she (Case 10) was possibly incubating the disease - her removal to hospital was arranged, as was that of her two-year-old son who was this day developing a definite Measles rash (a further confirmation that the double infection of Measles and Typhoid, which greatly added to the difficulty of initial diagnosis, had occurred in this house).

----- ... -----

The source of origin had not yet been discovered. It was felt that the memories of the patients, and/or their appreciation of the mode of spread were insufficient to find the cause, so it was decided to review all handlers of foodstuffs in the village, including travelling salesmen, such as fish and chip men, in the hope that a source would be found that could be related to all the patients.

Many of these investigations proved blank after showing promise. As an example of a false trail, the investigation with regard to the grocers might be stated. As previously recorded, all the infected households had given one grocer's store as their supplier; this grocer had been very helpful in producing copies of dated bills for every article supplied to the households. There was, however, a second grocer's store in the village and on questioning the owner it was found that he had one of the ration books from House No.3, three from House No2, and, moreover, Mrs. "B" of House "B", who shopped for House No.1, was also a registered customer - it was quite possible therefore, that some common purchase had been made at this shop, especially of unrationed goods. The owner, however, other than bacon had not cut up any foodstuff in his shop, e.g. food in an infected tin. He expressed sympathy in the search saying he knew how much work was involved, having been through the Croydon Typhoid Outbreak. This reference to Typhoid gave some hope.

Wednesday, July 9th. Samples of blood, however, taken from him and his wife were this day reported negative.

Enquiry was made about all milk suppliers and handlers. Houses "2" and "3" were supplied by the same milkman whose premises are outside the village and whose round is a very big one - House "1" was supplied from Farm "C". It was learned that one of the girls from House "3" sometimes sought milk at "C" for House "1", (because the crippled lady could not seek her own milk) so that an exchange of milk whereby House "1" would have the same supply as House "2" and "3" was a possibility. The milkman from outside the District had started a new girl on the milk round on June 9th. She was carefully tested, as were all the other milk handlers, but all gave negative Widal results.

It was learned also that the girl from House "3", in addition to calling at House "C" for milk, was a visitor to the adjoining House "B" (relatives of the patients in House "1") and also at the House "X" opposite, where she sometimes took out the grandchildren of the occupant Mrs. "X". This information established that Mrs. "B" was not only a contact of House "1" but was also a contact of House "3" - information which no one had previously been able to supply.

It was decided to question Mrs. "B" again in the hope that she could also be related to House "2", and also to question Mrs. "X" who, living directly opposite, might be able to furnish some information as to visitors. Neither Mrs. "B" or Mrs. "X" were at home when a call was made this day and so the patients from House No. "2" were visited at Exning Isolation Hospital. They were quite emphatic that no contact existed between them and Mrs. "B". Case 4 was told that he was a most peculiar lodger, as never once had it crossed his mind to bring two penny worth of food or drink into the house (House "2"), never once had he thought to bring a couple of bananas or a couple of oranges for the children - never even bought a head of lettuce. I was greatly surprised when he told me he had bought lettuce on Thursday, June 19th, and even more so when he told me that it was Mr. "B" who supplied him from his garden, for previously he had denied having procured lettuce and could not think of any association at all connecting him with Mrs. "B".

Thursday, July 10th. The patients from House "1" denied that they had had any lettuce, especially did they deny that they had had lettuce from House "B". Later in the day Case "3" remembered that his Aunt, Mrs. "B" had given him two lettuces which he took home (House "1"). Together with his mother (Case "2") and father (Case "1") he had eaten these.

Mrs. "B" was called upon and she remembered giving her nephew the two lettuces. Mr. "B" was sought at his work and remembered serving Case "4" (the lodger at House "2") with lettuces and he also said that he had served the girl from House "3". She was seen leaving his garden carrying "an armful of greens" on Sunday morning, June 15th. Blood samples were taken from Mr. and Mrs. "B", the only occupants of House "B".

Friday, July 11th. Learned that the blood samples taken from Mr. and Mrs. "B" were negative. This was surprising, as all the cases had now been related to lettuces supplied from their garden. Mr. "B", when he does water his garden, uses water from a now disused dug reservoir immediately behind his garden (he was quite emphatic, however, that during this season he had not watered his lettuces). Mrs. "B" was very annoyed at the suggestion that they might be the cause of the outbreak and remarked "Why pick on us, you might as well pick on Mrs. "X" opposite, she told us last night that she had had Typhoid in Spain." The withholding of this information until this moment was typical of many different people who withheld facts because they, mistakenly thought, they "might get someone into trouble."

Mrs. "X", whose home had been visited on Wednesday in her absence, was now at home and was interviewed. She said she did not know whether her illness had been Typhoid or Typhus at Myjorca, Spain, in September 1941. After having been seen by a doctor then, she had six weeks' illness, attended by three Spanish women and then still feeling "out of sorts", she went to the hills. She came to this country by air, (Lisbon, Spain to Shannon, Ireland, then Shannon to Bristol), arriving 12th June, 1942. She first came to the cottage in Rattlesden for two weeks in August 1942 and later in October 1942 took over the cottage from the previous owner. She left Rattlesden in February 1943 and again returned May 1944 and had been at Rattlesden continuously since then. A sample of blood was taken from her.

Case No. "5" was this day out in a full Measles Rash and extremely ill (another proof of double infection in House 2.)

On this day Dr. Stevens asked me to see the tenant (Case 13, Male 38 years) at House "4" as a possible case of Typhoid.

Dr. Roger, the County Medical Officer, accompanied me to Rattlesden to see the "lay-out" of the outbreak, and also gave me the benefit of his clinical advice on (Case "13").

Case "13", a cripple, was an insurance inspector with a very wide district, and was obviously seriously ill. Both Dr. Roger and I believed he was a clinical Typhoid, but Case "13", who was easily the most lucid of all the patients encountered, despite his toxicity, greatly impressed us both with his meticulous caution in all matters likely to lead to infection (he would never consent to eat or drink at houses "1", "2" and "3", or most of the houses which he visited in the course of his work, especially as from his work he had knowledge of the illnesses existing in these houses) and moreover, he was quite emphatic that being a keen gardener himself (and having produced his own lettuces) he had had no garden produce from the garden of House "B".

Despite Case "13's" clinical resemblance to Typhoid (abdominal distension, furred tongue, temperature, etc.) his caution and care so much impressed us that, together with other symptoms, e.g. constipation and toxicity (remembering and concentrating on thought was a difficulty) we decided that a diagnosis other than Typhoid, (e.g. Tubercular Meningitis) was a possibility. We agreed, therefore, to wait until mid-day the following day (when we hoped to have the result of the blood test on the sample we took) in order to decide into which type of hospital to have him removed. The result of the examination of Case "13's" blood was reported upon at mid-day the next day and was negative for Typhoid. Being certain that Case "13" was dangerously ill, it was arranged, with the concurrence of Dr. Stevens, that Case "13" should be removed to the West Suffolk General Hospital, Bury St. Edmunds. Before he was removed into this Hospital I called personally there and warned the staff of the still present possibility of Typhoid, and that they were to maintain all precautions until the case was finally diagnosed. On Thursday, 17th July, Typhoid Bacilli were found in Case "13's" blood, which was not a great surprise, but was indeed a very great disappointment, as, had his blood sample shown a positive Widal action in the first place, he would have been moved direct to an Isolation Hospital. As it was, the West Suffolk General Hospital asked for his immediate removal on being confirmed as a case of Typhoid. Case "13", unfortunately, was unable to withstand his attack of Typhoid and died on the afternoon of Tuesday, 22nd July.

Was he a primary case or a secondary case ?

There appeared to be no possibility of his having been infected by lettuce from the garden of House "B" and, therefore, it appeared that he was not a primary case.

Could he have been a secondary case ? That is, could he have been infected from one of the first cases ?

It is true that he visited, to the door of, the three infected houses "1", "2" and "3", and that he had received money and given change to the occupiers in the course of his business, but he was not the type of man to hold his pencil or money in his mouth, despite the fact that he had not the full use of one arm - moreover, he was more fully alive to the risk of infection than most people and exercised extreme caution.

It would seem, however, that the fates had marked him down, for it was learned later that Mrs. "X" had called at his house, about insurance, on one of those very hot summer days, and whilst sitting on a seat in the garden had offered him a sticky sweet with the remark "Excuse fingers". This sweet he ate and, it appears in so doing, undid all his years of extreme caution with regard to the risk of infection.

This history of Case "13" has upset the chronological order of description of the outbreak, so that it is now necessary to revert to

Saturday, July 12th. On this day, when Case "13's" blood was reported negative, we received from the Emergency Public Health Laboratory a report on Mrs. "X's" blood which was that she obviously had had Typhoid (not Typhus) and, moreover, her blood reaction was indicative of her now being a carrier.

House "X" had a pail closet, the contents of which were buried in the garden. Levels were taken by Mr. Casson, Surveyor to Thingoe R.D.C., and showed that the lowest point of Mrs. "X's" garden was 2" below the surface of the water in the dug reservoir which Mr. "B" used (when he did any watering) to water his garden, but the water in the reservoir was 6 feet 2 inches in depth. The bottom of the reservoir was therefore 6 feet lower than the lowest point of Mrs. "X's" garden.

A well was dug during the war at the nearby House "C" and it was noted that the strata here, of blue clay and chalk, are very thinly laid - in digging the well they alternated at nearly every spit depth. It is, therefore, a physical possibility for Typhoid germs, from the pail closet contents buried in the garden of House "X" to gravitate into the water in the reservoir behind House "B".

Mrs. "X" was informed of the result of her blood test and further bacteriological samples were taken from which Typhoid Bacilli were isolated. She was advised on precautions and was strongly advised to refrain from visiting and visitors until a change of domicile satisfactory to all could be arranged. She was still hostile to the thought that she might be the cause of this outbreak and asked "Why pick on me, why not go to Mrs. "B's" brother-in-law who had Typhoid in 1944?" She was referring to the man who lives in House "A", who is the first quoted on the list of the previous cases in Thedwastre this century.

This remark probably threw some light upon how this man was infected in 1944, for he remembered that at that time he was a visitor to house "B". It is quite certain that he had not been in touch with the present cases, nor visited House "B" for some 2 years. He was, nevertheless, subjected to an examination and all the tests carried out on him showed that he could not have been the cause of this outbreak.

Tuesday, 15th July. The mother of the four children in House "3", (Case 11) developed Typhoid this day.

She was a secondary case, having been infected whilst nursing her children.

Wednesday, 16th July. A blood sample was taken from a lady, aged 67 years, residing at House "5" (Case 14) which is in close proximity to House "X". This lady was complaining of a vague illness. The next day, Thursday, 17th, the Widal report on the blood sample taken was negative.

Thursday, 17th July. A male, aged 6 years, Case 12, the original Measles case in House "2", this day developed Typhoid. - thus proving that his original illness was Measles.

He was a secondary case, having been infected from the previous cases in the house.

Friday, 18th July. It was learned this day that a female, aged 22, (Case 15) who had been on holiday to her parents' house, House "6", in Rattlesden from June 6th to June 26th, had been removed to the Isolation Hospital, Cheltenham, as a case of Typhoid. It was later learned that she was regarded as an atypical case. She gave a blood reaction positive 1/1000 H but no organism was recovered and her stay in hospital was only one week.

It was difficult to get all details concerning this girl, and certainly it was not possible to relate her illness to lettuces from House "B", but it was learned that whilst shopping for her mother, she was, together with Mrs. "X", the only other customer in the grocer's stores and it is not known whether or not she also "excused fingers".

Monday, 28th July. The sample taken on the 16th July from the 67 year old lady (Case 14) residing at House "5" had given a negative Widal, but bearing in mind that this had occurred with Case 13, Dr. McFarlane visited with me to take a further sample and to note her clinical condition. She had, obviously deteriorated greatly in the interval and was apparently dying, but not of Typhoid.

Tuesday, 29th July. A negative report was received on this blood sample.

Wednesday, 30th July. This lady died (Case 14), the cause being Uraemia.

Friday, 1st August. The Emergency Laboratory succeeded this morning in isolating Typhoid germs from blood clot culture from the blood sample taken on Monday, July 28th, from (Case 14) which had yielded a negative Widal reaction. This proved that this lady, (Case 14) had been infected with Typhoid during her illness, after the first blood sample was taken, and if she had lived a few days longer would have been a definite case. The history of her last few days was carefully obtained and her diet checked. She had no garden produce from House "B". She went to bed on the evening of Tuesday, 8th July, and was never out of the house after this. Therefore, the Typhoid germs must have been brought to her whilst she was ill in bed.

It was alleged by her relatives and her neighbour, Mrs. "X", that Mrs. "X" had not visited her during her illness. Enquiries, however, did elicit, and then it was admitted, that Mrs. "X" (despite the most definite instructions to keep apart from other people and to avoid visitors, given on Saturday, July 12th, and subsequent days as further positive reports on samples from her were received) had visited this lady, Case 14, for two hours on the evening of Saturday, July 19th.

Case "14", having died, it was impossible to obtain from her information as to whether food or drink was passed to her by Mrs. "X", or whether Mrs. "X" handled food vessels or cups or glasses, or whether Case "14" also "Excused fingers". It is of interest to note, as a probable grave, prognostic sign, that the Widal Test was negative in both the fatal cases (Cases 13 and 14).

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This completed the cases which occurred during this outbreak. Clinically, they were most interesting and many of them gave rise to great anxiety. It is certain that but for the splendid efforts of the staff at Ipswich Isolation Hospital and at Exning Isolation Hospital the death roll would have been much greater.

That the primary cases arose either from lettuces infected by water from a disused reservoir polluted by Typhoid germs which had drained from the garden of the house of Mrs. "X" or by contamination of articles or food taken from the hands of Mrs. "X" epidemiologically appears irrefutable on the following chain of evidence:-

Consumption by the cases from Houses "1", "2" and "3" of raw green stuff from a particular garden.

Despite occupants of the house with this garden being free from Typhoid a history of a previous attack of Typhoid in a neighbour was obtained.

A blood test of this neighbour showed that she was probably a Typhoid Carrier.

Specimens examined from her proved her to be a carrier.

The levels of her garden and that of the reservoir made spread possible.

Direct contact between this Carrier and Cases 13, 14 and 15 was established in addition to the presumed indirect infection of Cases 1, 2, 3, 4, 5, 6, 7, 8 & 9. (The remaining three cases, No. 10, 11 & 12 were secondary cases).

A possible previous victim (at House "A", brother-in-law of Mrs. "B" House "B") was indicated.

That such a million to one coincidences could occur without Mrs. "X" being the source of infection appears beyond possibility. It is true, however, that scientific proof of the fact that the presumed cause was the actual cause cannot be established for all the cases had Typhoid germs of Type "E", but the germs carried by Mrs. "X" were of Type "A".

Dr. Craigie and Dr. Felix (Lancet, June 14th, 1947, Pages 824 and 825) writing on "Typing of Typhoid Bacilli with Vi Bacteriophage" state:-

"Type A. - This occupies an exceptional position in the phage-typing scheme in that it is fully sensitive to all Vi-phage II preparations. Epidemiological observations on numerous groups of cases and related carriers infected with such strains appear to warrant the retention of Type A in the scheme. However, laboratory observations extending over seven years suggest that Type A should be regarded as an infrequent variant of some of the other Vi-types of *S. typhi*.

Type A has been isolated from cultures of strains of Types B1, C, D5, F1, N, O, and T (Craigie 1940, Felix unpublished observations). Most of these observations have been made on strains maintained in the laboratory a long time, though occasionally the appearance of Type A has also been noted shortly after isolation.

Of even greater importance, from the point of view of the epidemiologist, is evidence that such a dissociation may occur in chronic carriers of long standing. In one instance Type A was isolated from a primary plating from a Type O carrier, and in another instance from a Type T carrier. Possibly environmental changes involved in transfer of the organisms to laboratory media may have provided the necessary conditions for the emergence of Type A.

These facts must, therefore, be borne in mind when an infection with Type A is encountered in apparent association with infections due to one of the other types. A single source of infection cannot be absolutely excluded when one of the types concerned is Type A . "

The Typhoid at Myjorca, Spain, in 1941 was not typed, so it cannot be shown (although it is presumed) that Mrs. "X", a chronic carrier, had caused dissociation of Type E.

My thanks are due, and are extended, to many people:-

To The General Practitioners in the District

who reviewed their recent cases, and especially to Dr. Stevens, a very busy general practitioner, who devoted himself to this village whilst the outbreak was developing and throughout its course keeping me informed of all illness.

To Dr. Roger, County Medical Officer,

for his assistance with Case 13 and the transport of specimens to the Public Health Laboratory at Ipswich.

To Capt. J. P. Mara, Officer Commanding Rattlesden Satellite Camp, for his co-operation.

To Drs. Fry, McFarlane and Martin of the Emergency Public Health Laboratory Service,

for their 24 hour per day service in the Laboratory, help at Rattlesden and review of each fresh development.

Mr. Casson and Mr. Barker, Sanitary Inspectors of Thingoe,

who assisted in the door to door inspection, and who carried out the surveying work to find levels of the reservoir and garden.

To Mr. Wyatt, Thedwastre Sanitary Inspector,

for his continuous efforts:

To the people of Rattlesden

who were questioned and who allowed blood samples to be taken - there was not one refusal.

To Mr. Daking,

Chairman of the Thedwastre Council, for his great interest and encouragement. The week taken to find and confirm the probable source of infection was one of very considerable anxiety and the subsequent progress of many of the patients also caused great concern. This anxiety and concern was shared and greatly reduced for me by the encouragement and confidence expressed by Mr. Daking.

To the Thedwastre Council

for their kind consideration in placing on record their appreciation of the handling of this outbreak.

The outcome of the infection, although grave, was more fortunate than might otherwise have occurred, for until the District has the Comprehensive Water Scheme and modern sewage facilities there will be no room for complacency. This is indicated by the fact that in Rattlesden, this parish of 215 houses, in addition to Mrs. "X", the carrier, there were found during the course of investigations, a further four persons who had had a previous attack of Typhoid and might, therefore, have been, although it was proved that they were not, Typhoid carriers.



